

IN THE CLAIMS:

Cancel claims 7 and 12 without prejudice or disclaimer.

Please amend the claims as shown below:

Claim 1 (currently amended): An optical receiver comprising:

- (a) a substrate;
- (b) a back-illuminated photodiode (PD) placed on the substrate;
- (c) a light-transmitting medium that:
 - (c1) is placed on the substrate; and
 - (c2) receives light, having multiplexed wavelengths, from outside; and
- (d) a wavelength-selecting filter that:
 - (d1) is placed attached directly at the end face of the light-transmitting medium in such a way that the filter is slanted at an angle of 4 to 12 degrees to the plane perpendicular to the optical axis;
 - (d2) selects light having a specified wavelength out of light emerging from the light-transmitting medium; and
 - (d3) transmits the selected light to the PD to enable the PD to detect it.

Claim 2 (currently amended): An optical receiver comprising:

- (a) a substrate;
- (b) a back-illuminated PD placed on the substrate;
- (c) a light-transmitting medium that:
 - (c1) is placed on the substrate; and
 - (c2) receives light, having multiplexed wavelengths, from outside; and

(d) a wavelength-selecting filter that:

(d1) is placed at the midpoint of the light-transmitting medium in such a way that the filter is slanted at an angle of 4 to 12 degrees to the plane perpendicular to the optical axis;

(d2) selects light having a specified wavelength out of light emerging from the light-transmitting medium; and

(d3) transmits the selected light to the PD to enable the PD to detect it.

Claim 3 (original): An optical receiver as defined in claim 1, wherein the light-transmitting medium is an optical fiber.

Claim 4 (original): An optical receiver as defined in claim 1, wherein the light-transmitting medium is an optical waveguide formed on the substrate.

Claim 5 (original): An optical receiver as defined in claim 2, wherein the light-transmitting medium is an optical fiber.

Claim 6 (original): An optical receiver as defined in claim 2, wherein the light-transmitting medium is an optical waveguide formed on the substrate.

Claim 7 (canceled)

Claim 8 (original): An optical receiver as defined in claim 1 or 2, wherein the substrate is a ceramic substrate.

Claim 9 (original): An optical receiver as defined in claim 1 or 2, wherein the substrate is an Si substrate.

Claim 10 (original): An optical receiver as defined in claim 4 or 6, wherein the optical waveguide is an SiO₂-based optical waveguide.

Claim 11 (original): An optical receiver as defined in claim 1 or 2, wherein the PD, the wavelength-selecting filter, and part of the light-transmitting medium are covered with a transparent resin.

Claim 12 (canceled)

Claim 13 (original): An optical receiver as defined in claim 1 or 2, wherein an amplifier is provided on the substrate to amplify the photocurrent generated by the PD.

Claim 14 (original): An optical receiver as defined in claim 3, wherein:

- (a) a groove is formed on the substrate to fix the optical fiber; and
- (b) an optical pathway-changing groove is formed on the substrate to reflect light having passed through the wavelength-selecting filter into the PD.

Claim 15 (original): An optical receiver as defined in claim 4, wherein an optical pathway-changing groove is formed on the substrate to reflect light having passed through the wavelength-selecting filter so that the light can be introduced into the PD.

Claim 16 (original): An optical receiver as defined in claim 5, wherein:

- (a) a groove is formed on the substrate to fix the optical fiber therein;
- (b) an oblique space is provided at a midpoint of the optical fiber;
- (c) the wavelength-selecting filter is inserted into the oblique space; and
- (d) an optical pathway-changing groove is formed on the substrate to reflect light

having emerged from the end of the optical fiber into the PD.

Claim 17 (original): An optical receiver as defined in claim 6, wherein:

- (a) an oblique space is provided at a midpoint of the optical waveguide;
- (b) the wavelength-selecting filter is inserted into the oblique space; and
- (c) an optical pathway-changing groove is formed on the substrate to reflect light

having emerged from the end of the optical waveguide into the PD.

Claim 18 (original): An optical receiver as defined in claim 6, wherein:

- (a) a space is provided at the midpoint of the optical waveguide;
 - (b) the wavelength-selecting filter is supported obliquely in the space;
 - (c) a collimator is placed in the space and in front of the wavelength-selecting filter;
 - (d) an inverse collimator is placed in the space and behind the wavelength-selecting filter; and
 - (e) an optical pathway-changing groove is formed on the substrate to reflect light
- having emerged from the end of the optical waveguide into the PD.

Claim 19 (original): An optical receiver as defined in claim 5, wherein:

- (a) a ferrule is provided and houses the optical fiber therein as a unitary structure;
- (b) a filter-supporting hole is provided at a midpoint of the ferrule;
- (c) the wavelength-selecting filter is inserted into the filter-supporting hole;
- (d) a groove is formed on the substrate to fix the ferrule; and
- (e) an optical pathway-changing groove is formed on the substrate to reflect light

having emerged from the end of the optical fiber into the PD.

Claim 20 (original): An optical receiver as defined in claim 5, wherein:

(a) the wavelength-selecting filter is a collimator-integrated wavelength-selecting filter, in which a wavelength-selecting filter, a collimator placed in front of the filter, and an inverse collimator placed behind the filter are integrated into a single unit;

(b) a ferrule is provided and houses the optical fiber therein as a unitary structure;

- (c) a filter-supporting hole is provided at the midpoint of the ferrule;
- (d) the collimator-integrated wavelength-selecting filter is inserted into the filter-supporting hole;

- (e) a groove is formed on the substrate to fix the ferrule; and
- (f) an optical pathway-changing groove is formed on the substrate to reflect light

having emerged from the end of the optical fiber into the PD.

Claim 21 (original): An optical receiver as defined in claim 19 or 20, wherein:

(a) the wavelength-selecting filter is placed perpendicular to the axis of the optical fiber;

- (b) gaps are provided between the wavelength-selecting filter and the filter-supporting hole; and
- (c) a transparent resin fills the gaps.

Claim 22 (original): An optical receiver as defined in claim 19 or 20, wherein:

- (a) the wavelength-selecting filter is placed obliquely to the axis of the optical fiber;
- (b) gaps are provided between the wavelength-selecting filter and the filter-supporting hole; and
- (c) a transparent resin fills the gaps.

Claim 23 (original): An optical receiver as defined in claim 5, wherein:

- (a) the wavelength-selecting filter is a collimator-integrated wavelength-selecting filter, in which a wavelength-selecting filter, a collimator placed in front of the filter, and an inverse collimator placed behind the filter are integrated into a single unit;
- (b) a ferrule is provided and houses the optical fiber therein as a unitary structure;
- (c) the ferrule is severed at the midpoint;
- (d) the collimator-integrated wavelength-selecting filter is inserted into the severed portion;
- (e) a groove is formed on the substrate to house the ferrule together with the collimator-integrated wavelength-selecting filter;
- (f) the groove aligns the center of the collimator-integrated wavelength-selecting filter with that of the optical fiber;

- (g) the ferrule and the collimator-integrated wavelength-selecting filter are fixed in the groove; and
- (h) an optical pathway-changing groove is formed on the substrate to reflect light having emerged from the end of the optical fiber into the PD.